UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,068	09/07/2000	Kenneth M. Buckland	062891.0362	1585
5073 BAKER BOTT	7590 07/26/2007 CS L.L.P.	·	EXAMINER	
2001 ROSS AV		WILSON, ROBERT W		
SUITE 600 DALLAS, TX 75201-2980			ART UNIT	PAPER NUMBER
			2616	
		·		
			NOTIFICATION DATE	DELIVERY MODE
			07/26/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mike.furr@bakerbotts.com ptomail1@bakerbotts.com



.,,		Application	n No.	Applicant(s)				
Office Action Summary		09/657,06	8	BUCKLAND, KEN	INETH M.			
		Examiner		Art Unit				
		Robert W.	·	2616	'			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed on 08	3 June 2007.						
·	This action is FINAL . 2b) ☐ This action is non-final.							
'=	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
٠,۵	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4) 🛛	Claim(s) <u>1,3-7,9-16,18-33,35-38 and 40</u> is/a	are pending in	the application.					
•	4a) Of the above claim(s) is/are withdrawn from consideration.							
	5) Claim(s) is/are allowed.							
6)⊠	6)⊠ Claim(s) <u>1,3-7,9-16,18-33,35-38 and 40</u> is/are rejected.							
7)	Claim(s) is/are objected to.		-					
8)□	Claim(s) are subject to restriction and	d/or election re	equirement.					
Applicati	on Papers							
9)	The specification is objected to by the Exam	iner.						
10)	The drawing(s) filed on is/are: a) a	accepted or b)	objected to by the E	Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)								
	e of References Cited (P10-892) e of Draftsperson's Patent Drawing Review (PT0-948)		Paper No(s)/Mail Da	ate				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date			5) Notice of Informal P 6) Other:	atent Application				

Application/Control Number: 09/657,068 Page 2

Art Unit: 2616

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 20-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 20, what is meant by: "segmenting the ingress packets at a CEP interface of access network .. wherein the ingress cells include either or both of a virtual private interface and virtual connection ingress generated form the IP address of a packet" and "aggregating the ingress AAL cells in the access network into a single combined traffic stream without regard to any path or destination of any packet form the customer premise equipment"? How does one have an address and then combine without regard to destination?

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 3-7, 9-16, 18-33, 35-38 & 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Referring to claims 1, 16, 20, & 26, the applicant's specification teaches ingress traffic streams of IP packets are aggregated into a combine traffic stream without processing the IP final address per Pg 3 lines 15 to 21. No where in the specification does it teach that the traffic streams are aggregated and sent without regard to path. Referring to claims 1, 16, 20, & 26, what is meant by "aggregating the ingress traffic streams into a single combined traffic stream without regard to any path or destination of any packet from any ingress traffic stream" per claims 1 and similarly in claims 16, 20, & 26 respectively.

Application/Control Number: 09/657,068

Art Unit: 2616

Claim Rejections - 35 USC § 112

Page 3

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 3-7, 9-16, 18-33, 35-38 & 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Referring to claims 1, 16, 20, & 26, what is meant by "aggregating the ingress traffic streams into a single combined traffic stream without regard to any path or destination of any packet from any ingress traffic stream" per claims 1 and similarly in claims 16, 20, & 26 respectively. How is it possible to send traffic without a path? How is it possible to send traffic without a destination address? How is it possible to send traffic without both a destination address and a path?

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3-7, 9, 10-12, 13, 14-16, & 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Keller-Tuberg (U.S. Patent No.: 6,504,844).

Referring to claim 1, Keeler-Tuberg teaches: A method for processing traffic in an access network comprising: receiving a plurality of ingress traffic streams each ingress traffic stream including a plurality of packet having a destination address whereon the packets are Internet Protocol (IP) packets and each include an IP destination address (The subscriber computer (10 creates IP packets with an IP source address and IP destination address. The modem (11) encapsulates the IP packets into ATM AAL5 without regard to Internet destination address and

sends the ATM AAL5 with a VPI/VCI path to the host access exchange per col. 4 line 52 to col. 6 line 22)

aggregating the ingress traffic streams into a single combined traffic stream without regard to any path or destination of any packet from any ingress traffic stream to a backbone network for routing (The input to the host access exchange is the aggregation point for all of the AAL5 packets from all of the modems without regard to Internet destination address of any packet from the ingress traffic stream per col. 4 line 52 to col. 6 line 22) and

transmitting the combined traffic stream to a backbone for routing (The combined traffic stream is transmitted through the access exchange where just before the output port the AAL5 packets are de-encapsulated from the ATM AAL 5 into IP packets where they are routed by an inherent router in the Data network to an ISP and Internet based upon the Internet Destination Address in the IP packet per col. 4 line 52 to col. 6 line 22)

In addition Keller-Tuberg teaches:

Regarding claim 3, further comprising: receiving each of the ingress traffic streams from customer premise equipment (The Access Gateway receives the ingress traffic from the modems (customer premise equipment per col. 4 line 52 to col. 6 line 22) and

transmitting the combined traffic stream to a backbone router in the backbone network (The combined traffic stream is transmitted through the access exchange where just before the output port the AAL5 packets are de-encapsulated from the ATM AAL 5 into IP packets where they are routed by an inherent router in the Data network to an ISP and Internet based upon the Internet Destination Address in the IP packet per col. 4 line 52 to col. 6 line 22)

Regarding claim 4, further comprising: validating IP packets in the ingress traffic stream and aggregating all valid packets into the combine traffic stream. (The access gateway validates the IP SA per col. 6 lines 6 to 23)

Regarding claim 5, further comprising: routing IP packets of the ingress traffic streams to a network interface port of an access device and aggregating the IP packets into the combined traffic stream at the network interface port (IP packets from the subscriber computer are routed to the input port on the modem where they are aggregated into a combined traffic stream per col. 4 line 52 to col. 6 line 22)

Regarding claim 6, further comprising: receiving the ingress traffic streams at a plurality of customer premise equipment (CPE) ports (Access Exchange receives a plurality of streams from modems or CPE ports

Segmenting at the CPE ports the IP packets in the ingress traffic streams into asynchronous transport mode (ATM) adaption layer (AAL) cells wherein the AAL cells include either or both a virtual private interface and a virtual connection interface (VPI/VCI) ATM address generated

form the IP address of the IP packets (Mode (CPE ports) segments IP packet into AAL5 and adds VPI/VCI per col. 4 line 52 to col. 6 line 22)

Switching the AAL cells to a network interface port (Modem switches AAL5 to output port or network interface port per col. 4 line 52 to col. 6 line 22)

Aggregating the IP packets into the combined traffic stream (The modem aggregates the IP packets into combined ATM traffic stream per col. 4 line 52 to col. 6 line 22)

Regarding claim 7, further comprising segmenting IP packets at each CPE port into sets of ALL cells having a fixed ATM address associated with the CPE port (The modem segments IP packets and the modem has an inherent VPI/VCI or fixed ATM address associated with the port on the modem per col. 4 line 52 to col. 6 line 22)

Buffering the AAL cells at the network interface port based on their ATM address and Reassembling the IP packets from completed sets of AAL cells (Fig 2 shows inherent buffering of the AAL cells at the network interface port based on their ATM address and reassembling the IP packets for completed sets of AAL cells per Fig 2)

Regarding claim 9, wherein the IP packets are segmented into ATM adaption layer five (AAL-5) cells (The IP packets are segmented into ATM adaption layer five (AAL-5) cells per Fig 2 per col. 4 line 52 to col. 6 line 22)

Regarding claim 10, further comprising: receiving an egress traffic stream from the backbone network, the egress traffic stream including a plurality of IP packets each having an IP address; determining a customer premise equipment ("CPE) port for each IP packet based on its IP address; routing the IP packets to their respective CPE ports and transmitting the IP packets form the CPE ports to their destination CPE (The data gateway receives egress traffic streams of cells from the Internet an encapsulates these packets into ATM. The exchange/ISP interface receives the incoming egress traffic including a plurality of IP packets. The exchange/ISP interface takes the VP/VC and de-multiplexes the packet to determine the IP DA for the subscriber and then assigns a VPI/VCI or port # for the subscriber PC or CPE per col. 6 lines 23-53. The data access network transmits the IP packet encapsulated in ATM to the proper VPI/VCI or CPE port based upon destination per Fig 1 and per col. 4 line 52 to col. 6 line 22)

Regarding claim 11, further comprising determining the CPE ports for the IP packets using a static routing table (The associated table specifies the VP/VC identifier based upon destination address. The associate table is a static routing table per col. 6 lines 23-53)

Regarding claim 12, the exchange/ISP interface determines VPI/VCI or ATM address for each IP packet based upon the IP DA and adds the VPI/VCI to the ATM header. The ATM cells are AAL-5 which inherently means that they were segmented. The data access network inherently has switches that switch AAL cells to the computer to ATM card or CPE port based upon the

VPI/VCI or ATM address. The ATM card or CPE port inherently reassembles the IP packet for delivery per col. 6 lines 23-53.

Regarding claim 13, further comprising: buffering the AAL cells at each CPE port based on their ATM address and reassembling the IP packets from the completed sets of AAL cells (The modem inherently buffers the AAL cells prior to transmitting IP packets to the computer based upon complete sets of AAL cells per col. 4 line 52 to col. 6 line 22)

Regarding claim 14, wherein the ATM address comprises either or both a virtual private interface and virtual connection interface address (The ATM address comprises a VPI/VCI address per col. 6 lines 23-53.)

Regarding claim 15, wherein the IP packets are segmented into ATM adaption layer five (AAL-5 cells) the packets from the ISP which routes over the Internet are inherently IP and they are AAL-5 which inherently segments per col. 6 lines 23-53.

Referring to claim 16, Keller-Tuberg teaches: A system for processing traffic in an access network (Fig 1) comprising:

means for aggregating a plurality of ingress traffic stream from customer premise equipment (CPE) into a single combine traffic stream for transmission to a backbone network (The input to the host access exchange is the aggregation point or means for all of the AAL5 packets from all of the modems without regard to Internet destination address of any packet from the ingress traffic stream for transmission to Data Network and Internet The combined traffic stream is transmitted through the access exchange where just before the output port the AAL5 packets are de-encapsulated from the ATM AAL 5 into IP packets where they are routed by an inherent router in the Data network to an ISP and Internet based upon the Internet Destination Address in the IP packet per col. 4 line 52 to col. 6 line 22)

means for routing egress traffic received from the backbone network to CPE using a static routing table (The access exchange receives IP traffic from Data Network and Internet or backbone network which is being routed to the modems or CPE and uses a routing table which converts the IP address into an ATM address) wherein the plurality of ingress traffic streams are aggregated into the single combined traffic stream without regard to any path or destination of any IP packet form any ingress traffic stream (The subscriber computer (10 creates IP packets with an IP source address and IP destination address. The modem (11) encapsulates the IP packets into ATM AAL5 without regard to Internet destination address and sends the ATM AAL5 with a VPI/VCI path to the host access exchange per col. 4 line 52 to col. 6 line 22)

In addition Keller-Tuberg teaches:

Regarding claim 18, further comprising: means for segmenting IP packets into asynchronous transport mode (ATM) adaption layer (AAL) cells, wherein the AAL cells include either or both

Application/Control Number: 09/657,068

Art Unit: 2616

a virtual private interface and virtual connection interface (VPI/VCI) address generated from the IP address of the IP packets (The IP packets have Destination address and are segmented by the modem into AAL cells per col. 4 line 52 to col. 6 line 22)

Page 7

Means for switching the AAL cells within the access network (The AAL cells are switched by both the modems and the inherent switches in the data network per Fig 1) means for reassembling the AAL cells into outgoing IP packets (Access exchange has ability or means to reassemble the IP packet per col. 4 line 52 to col. 6 line 22)

Regarding claim 19, wherein the IP packets are segmented into ATM adaption layer five (AAL-5) cells (modem segments the IP packets into ATM AAL-5 cells per col. 5 lines 37-44)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 20-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Keller-Tuberg (U.S.

Patent No.: 6,504,844) in view of Ksirasagar (U.S. Patent No.: 6,016,319)

Referring to claim 20, a method for routing traffic in an access network (The system per Fig 1 performs the method) comprising:

receiving ingress Internet Protocol (IP) packets from customer premise equipment (CPE) each IP packet having an address (The Host Data Access Exchange receives IP packets which have been encapsulated into ATM cells per Fig 1 per col. 4 line 52 to col. 6 line 22);

receiving the egress IP packets from a backbone network for delivery to the CPE (The Host Data Access Exchange receives IP packets from the combination of Data Network and Internet per Fig 1)

segmenting the ingress IP packets at a CPE interface of an access network into ingress asynchronous transport mode (ATM) adaption layer (AAL) cells (The ingress IP packets are segmented into AAL via the Modem per Fig 1) wherein the ingress AAL cells include either or

both a virtual private interface and virtual connection interface (VPI/VCI) address (The AAL cells have both a VC/and VP per col. 4 line 52 to col. 6 line 22)

segmenting the egress IP packets at a network interface into egress AAL cells (The IP packets are segmented at the egress port of the Host Access Exchange per Fig 1);

providing the egress AAL cells to the customer premise equipment (Egress ATM cells are provided to the mode (CPE) per Fig 1);

aggregating the ingress AAL cells in the access network into a single combined traffic stream without regard to any path or destination of any packet from the customer premises equipment (The modem (11) encapsulates the IP packets into ATM AAL5 without regard to Internet destination address and sends the aggregated ATM AAL5 cells with a VPI/VCI path to the host access exchange per col. 4 line 52 to col. 6 line 22)

Keller-Tuberg does not expressly call for: generating either or both a VPI or VCI from the IP address

Kshirsagar teaches: generating either or both a VPI or VCI from the IP address per Fig 1

It would have been obvious to add the generating either or both a VPI or VCI from the IP address of Ksirsagar to the system of Keller-Tuberg in order to send packets to the Internet.

In addition Keller-Tuberg teaches:

Regarding claim 21, wherein the IP packets are segmented into ATM adaption layer five (AAL-5) cells (ingress segmented into AAL-5 per col. 5 lines 37 and egress segmented into AAL-5 per col. 6 line 43)

Regarding claim 22, further comprising reassembling the AAL cells into IP packets at a periphery of the access network (AAL cells are reassembled into IP packets in the modems or edge of the access network per Fig 1)

Regarding claim 23, further comprising delineating the IP packets (IP packets are delineated by the modem per Fig 1)

Regarding claim 24, further comprising validating the IP packets (the source address is verified or validated per col. 6 lines 9-21.)

Regarding claim 25, further comprising dropping defective IP packets (IP packet is discarded if the source address verified is invalid per col. 6 lines 9-21)

Application/Control Number: 09/657,068

Art Unit: 2616

9. Claims 26-33, 35-38 & 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Page 9

Keller-Tuberg (U.S. Patent No.: 6,504,844)

Referring to claim 26, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement method of claim 1 in software because a method requires a processor in order to be implemented. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the software on a computer processable medium in order executable on a processor.

In addition Keller-Tuberg teaches:

Regarding claim 27, the logic further operable to receive each of the ingress traffic streams from the customer premise equipment (The Access Exchange receives ingress traffic streams from the modems or customer premise equipment per Fig 1)

Regarding claim 28, the logic further operable to transmit the combined traffic stream to the backbone router in the backbone network (combined traffic stream is transmitted to inherent router in the Data Access Network per Fig 1)

Regarding claim 29, the logic further operable to validate IP packets in the ingress traffic stream and to aggregate all valid packets into the combined traffic stream (The exchange interface determines if the source address is validated and aggregates per col. 6 lines 9-21 & col. 6 lines 38-39.)

Regarding claim 30, further operable to route I packets in the ingress traffic streams to a network interface port of the access device and to aggregate the IP packets into the combine traffic stream at the network interface port (IP packets from the subscriber computer are routed to the input port on the modem where they are aggregated into a combined traffic stream per col. 4 line 52 to col. 6 line 22)

Regarding claim 31, further operable to receive the ingress traffic streams at a plurality of customer premise equipment (CPE) ports (CPE) ports (Access Exchange receives a plurality of streams from modems or CPE ports)

Segmenting at the CPE ports the IP packets in the ingress traffic streams into asynchronous transport mode (ATM) adaption layer (AAL) cells wherein the AAL cells include either or both a virtual private interface and a virtual connection interface (VPI/VCI) ATM address generated form the IP address of the IP packets (Mode (CPE ports) segments IP packet into AAL5 and adds VPI/VCI per col. 4 line 52 to col. 6 line 22)

Switching the AAL cells to a network interface port (Modem switches AAL5 to output port or network interface port per col. 4 line 52 to col. 6 line 22))

Aggregating the IP packets into the combined traffic stream (The modem aggregates the IP packets into combined ATM traffic stream per col. 4 line 52 to col. 6 line 22))

Regarding claim 32, wherein the IP packets are segmented into ATM adaption layer five (AAL-5) cells (The IP packets are segmented into ATM adaption layer five (AAL-5) cells per Fig 2)

Regarding claim 33, further operable to segment each IP packets at each CPE port into sets of AAL cells having a fixed ATM address associated with the CPE port (The modem segments IP packets and the modem has an inherent VPI/VCI or fixed ATM address associated with the port on the modem per col. 4 line 52 to col. 6 line 22)

Buffering the AAL cells at the network interface port based on their ATM address and Reassembling the IP packets from completed sets of AAL cells (Fig 2 shows inherent buffering of the AAL cells at the network interface port based on their ATM address and reassembling the IP packets for completed sets of AAL cells per Fig 2)

Regarding claim 35, further operable to receive egress traffic stream from the backbone network, the egress traffic stream including a plurality of IP packets each having an IP address; determining a customer premise equipment ("CPE) port for each IP packet based on its IP address; routing the IP packets to their respective CPE ports and transmitting the IP packets form the CPE ports to their destination CPE (The data gateway receives egress traffic streams of cells from the Internet an encapsulates these packets into ATM. The exchange/ISP interface receives the incoming egress traffic including a plurality of IP packets. The exchange/ISP interface takes the VP/VC and de-multiplexes the packet to determine the IP DA for the subscriber and then assigns a VPI/VCI or port # for the subscriber PC or CPE per col. 6 lines 23-53. The data access network transmits the IP packet encapsulated in ATM to the proper VPI/VCI or CPE port based upon destination per Fig 1 per col. 4 line 52 to col. 6 line 22)

Regarding claim 36, further operable to determine the CPE ports for the IP packet using a static routing table (The associated table specifies the VP/VC identifier based upon destination address. The associate table is a static routing table per col. 6 lines 23-53)

Regarding claim 37, further operable to determine an asynchronous transport mode (ATM) address of each packet based on its IP address, segment each IP packet into a set of ATM adaption layer (AAL) cells having the ATM address for the IP packet, switch the AAL cells to their respective CPE ports based on the ATM addresses and reassemble the Ip packets form the AAL cells at each CPE port for delivery based on their IP address (Access exchange determines VPI/VCI or ATM address for each IP packet based upon the IP DA and adds the VPI/VCI to the ATM header. The ATM cells are AAL-5 which inherently means that they were segmented. The data access network inherently has switches that switch AAL cells to the computer or CPE port based upon the VPI/VCI or ATM address. The modem or CPE port inherently reassembles the IP packet for delivery per col. 6 lines 23-53.

Regarding claim 38, further operable to buffer the AAL cells at each CPE port based on their ATM address and reassemble the IP packets form completed set of AAL cells (The modems have inherent buffers which store the AAL cells prior to being reassembled into IP packets for delivery to the computer per Fig 1 per col. 4 line 52 to col. 6 line 22):

Regarding claim 40, wherein the IP packets are segmented into ATM adaption layer five (AAL-5) cells (The IP packets are segmented into ATM adaption layer five (AAL-5) cells per Fig 2 & per col. 4 line 52 to col. 6 line 22))

Response to Amendment

10. Applicant's arguments filed 6/8/07 have been fully considered but they are not persuasive.

The examiner respectively disagrees with the applicant argument that the reference Keller-Tuberg does not teach aggregating traffic into a single combine stream without regard to any path or destination of any packet from any ingress stream. Keller-Tuberg teaches: that the ATM AAL cells received on the access exchange port are aggregated without regard to the Internet Destination address per Fig 1.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571/272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert W Wilson

Pobert N. W. Com

Examiner

Art Unit 2616

RWW 7/16/07

EDAN ORGAD
PRIMARY PATENT EXAMINER

Elan Organ

7/19/07